From CRM to social CRM: a bibliometric review and research agenda for consumer research

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From CRM to social CRM: A bibliometric review and research agenda for consumer research

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ABSTRACT

Contemporary perspectives on customer relationship management and the parent concept of customer management gathered momentum in the mid-1980 s and early 1990s. The advent of digital technologies, especially social media, have prompted a further evolution of the concept. As a result, today's CRM systems must consider new measures, such as customer engagement and advocacy. Consequently, organisations' social CRM activities and investments have consistently increased in part underpinned by the increased usage of these technologies by consumers. Through a systematic literature review and bibliometric analysis, we identify three main themes in which research in this area has focused on: (1) CRM and impact on performance, (2) social media capabilities and CRM, and (3) CRM processes and strategic use. We also identify future research avenues in the field derived from our analysis of the literature, emphasising the implications for consumer research.

1. Introduction

Although the value and importance of managing customer relationships have long been recognised (Petrof, 1997; Sheth & Parvatiyar, 1995), the last three decades have witnessed a resurgence of interest (Arora et al., 2021; Harker & Egan, 2006; Möller & Halinen, 2000; Payne & Frow 2017; Stokić et al., 2018). The concept of customer relationship management (CRM), with its focus on the use of ICT to facilitate the development and maintenance of long-term customer relationships, first emerged in the 1990s (Galbreath & Rogers, 1999; Ngai, 2005; Payne & Frow, 2005; Soltani & Navimipour, 2016; Stone et al., 1996). Fuelled by developments in database technology (Jenkinson, 1995; Grönroos, 1999; Palmer, 2002) and a heightened recognition of customer relationship economics (e.g., Dick & Basu, 1994; Reichheld, 1993; Reichheld & Sasser, 1990), the concept has gradually evolved to harness new technologies and emerging channels, moving from database-driven CRM to electronic CRM (eCRM), mobile CRM (M−CRM) and, latterly, social CRM (SCRM) (Aldaihani et al., 2020; Choudhury & Harrigan, 2014; Greenberg, 2010a; Harrigan et al., 2015, 2020; Harrigan & Miles, 2014; Ngai, 2005; Ngai et al., 2009; Wahlberg et al., 2009).

In mass consumer markets, technology is an important relationship enabler, bridging the physical divide between producers and consumers, facilitating personalised interactions (Christy et al., 1996; Mitussis et al., 2006; Pitt et al., 1999; Steinhoff et al., 2019), and promoting customer involvement, engagement and 'empowerment' (Aldaihani et al., 2020; Arora et al., 2021; Cheng & Shiu, 2019). Social CRM uses social media technologies and the inherently relational characteristics of social media to manage customer relationships as an advanced version of CRM strategy (Ahani et al., 2017; Dewnarain et al., 2019; Harrigan et al., 2020; Stokić et al., 2018) and is defined by Trainor (2012, p.321) as "the integration of traditional customer-facing activities, including processes, systems, and technologies with emergent social media applications to engage customers in collaborative conversations and enhance customer relationships".

Several researchers have highlighted a link between CRM implementation and firm performance (Boulding et al., 2005; Charoensukmongkol & Sasatanun, 2017; Coltman, 2007; Foltean et al., 2019; Kim & Wang, 2019; Ngo et al., 2021) and firm-level capabilities (Cheng & Shiu, 2019; Guha et al., 2018; Harrigan et al., 2020; Trainor et al., 2014). However, others have adopted a more cautious tone, inferring that CRM technologies have yet to realise their full potential and that significant barriers to adoption remain (e.g., Gamage et al., 2021;

Harrigan et al., 2015; Stokić et al., 2018; Zablah, 2004). Moreover, concerns have been raised about the potential for CRM technologies to dictate the nature and quality of the relationship, with limited reference to important relational constructs such as customer trust, commitment, and satisfaction (Mitussis et al., 2006).

The last decade has witnessed a rapid increase in expenditure on commercial social CRM tools (Trainor et al., 2014) and growth in availability and vendor advocacy (e.g., Baird & Parasnis, 2011; Hootsuite, 2010; Sprout Social, 2021). This has been accompanied by a growth in practitioner-oriented articles and case studies highlighting, among others, the value of social customer service (Parise et al., 2016), social media listening (Crawford, 2009; Dubois & Bens, 2016; Stewart, 2019) and social customer engagement (Arora et al., 2021; Dewnarain et al., 2021). The extent to which the academic literature on SCRM has kept pace with these, and other developments within this rapidly evolving arena, is ripe for exploration (Paul, Lim et al., 2021). Our purpose, therefore, is to address a gap in the extant literature for a review of the current state of the SCRM, in line with Paul et al. (2021) assertion that literature reviews allow researchers to reconcile conflicting findings as well as suggest new research directions in a field of knowledge by examining prior literature in a transparent and replicable manner. In our case, by means of a systematic quantitative literature review (SQLR) – followed by a bibliometric analysis – we aim to provide an overview of this field by uncovering the main themes that have emerged from the SCRM literature (the articles and topics that have proven to be the most popular and influential) and identify gaps and avenues for future research. Consequently, we aim to address the following research questions:

RQ1: What is the current publication trend in social CRM?
RQ2: Which are the most influential articles on social CRM?
RQ3: Which themes involving social CRM are the most popular and emerging among scholars?
RQ4: What are future research areas in the field of social CRM?

Our study distinguishes from other literature reviews on social CRM in several aspects. First, our study aims to map the field of social CRM without focusing on a specific context or outcomes from the use of social CRM. For instance, other reviews on social CRM have chosen to follow a more hybrid approach (Paul et al., 2021) by narrowing their focus to a specific context (e.g., Yasiukovich and Haddara (2021) focused on SMEs) or to specific outcomes (e.g., Marolt et al. (2015) focused on the adoption of social CRM and their outcomes, or Küpper et al. (2014) focused on identifying performance measures). In our case, we followed a systematic approach, which is more appropriate when looking to synthesise an area of research by identifying all empirical evidence that fits pre-specified inclusion criteria to answer a particular research question (Paul et al., 2021). Second, our study adopts rigorous methods to analyse and synthesise the literature included in our review through bibliometric methods. Bibliometric methods are used to conduct quantitative analysis of written publications (Ellegaard & Wallin, 2015).

2. The emergence of social CRM

Customer relationship management (CRM) has evolved from a tactical perspective, where businesses leverage customer data to manage customer relationships towards a more strategic view. This means that the CRM core business process responsible for building and maintaining a network for stakeholder relationships (Boulding et al., 2005), has improved competitiveness and performance through, for example, reduced servicing costs, customer involvement in innovation and the cultivation of dynamic capabilities (Cheng & Shiu, 2019; Harrigan et al., 2020; Woodcock et al., 2011). Payne and Frow (2005 p.168) define CRM as 'a strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments. CRM unites the potential of

relationship marketing strategies and IT to create profitable, long-term relationships with customers and other key stakeholders.' Communication models have evolved to account for many-to-many interactions, especially after the emergence of social media (Dahl, 2018). Consequently, traditional perspectives of CRM that are underpinned by an operational and transactional approach, have some limitations when applied in a highly dynamic and interactive context where customers interact (Greenberg, 2010a). Established and emerging digitally mediated environments provide an apt platform for businesses and organisations to conveniently engage with existing and prospective consumers at all customer journey phases (Perez-Vega & Hopkinson, 2016). Stephen and Toubia (2010) suggest that social media allows participative, real-time, and personal approaches, catalysing CRM enablers and relationship marketing principles. CRM can benefit from social media, its relational characteristics (Harrigan et al., 2020) and properties, in particular, suit customer interactions (Olbrich & Holsing, 2011). In addition, social CRM enables marketers to interact with customers going a step ahead, enabling co-creation of products, services, value while providing access to extensive data and deeper customer insights (Hoyer et al., 2010; Olbrich & Holsing, 2011; Van Doorn et al., 2010).

The surge in the use of the Internet, particularly social networking platforms like Facebook, Twitter, Instagram and Snapchat, has brought in various opportunities and challenges for marketers seeking to manage customer relationships (Malthouse et al., 2013). These authors also suggest that social CRM technologies offer new acquiring, retaining and terminating relationship opportunities with consumers. Choudhury and Harrigan (2014) advanced this further by developing a theoretical model which integrates social networking technologies with existing CRM solutions. Parveen et al. (2015) established the positive impact of the adoption of SCRM on the management of customer relations and customer service activities. Finally, My Community Alert (2015) and Ruokolainen and Aarikka-Stenroos (2016) assert social CRM to be the most cost-effective CRM technology, offering a significant advantage for companies with limited advertising, marketing, and customer service budgets.

While few would dispute the potential value of SCRM technologies, access to these technologies is necessary but not sufficient for SCRM success. Firms must also possess the capabilities to use data gathered from social media technologies (Foltean et al., 2019; Trainor et al., 2014; Wang & Kim, 2017). Trainor et al. (2014) found that the impact of social media technologies on relational performance is moderated by the extent of the firm's SCRM capabilities or ability to derive actionable insights from data gathered from social media interactions. Furthermore, their findings suggest that social media technologies are most effective when combined with effective systems for customer relationship management, highlighting the complementarity between these two resources. The role of social media technologies as merely an enabler of relationships, requiring additional complementary customer management capabilities and an underlying relational orientation, is also emphasised by Choudhury and Harrigan (2014). Similarly, Cheng and Shiu (2019), in the context of a study examining the role of social media-based customer involvement on innovation performance, highlight that success is dependent on the combined effect of two key set of capabilities: the ability to forge and develop networks over social media; and the ability to process and interrogate the information gathered. Building on the work of Wang et al. (2013), Guha et al. (2018) suggest that the ability of firms to cultivate these capabilities over the long term, can facilitate the development of dynamic capabilities and enhance overall relational and firm performance. Harrigan et al. (2020, p.2) build on this work to identify SCRM as a 'second-order dynamic capability', comprising SCRM 'technology capabilities, customer engagement initiatives, and social information processes; mediating the relationship between technology as an input and performance as an output.'.

The adoption and use of the SCRM strategy have emerged as an active research area for scholars and marketing practitioners due to its various advantages in successfully managing customer relationships.

Given the relative newness of the concept of social CRM technologies, we aim to create a systematic literature review of the extant studies on social CRM that the literature offers.

3. Methodology and research design

To provide an updated overview of extant research on social customer relationship management and assess the related literature quantitatively, we carried out a systematic quantitative literature review (SQLR), drawing on Elsevier's Scopus database, corroborated with bibliometric mapping. SQLR is considered a necessary tool to systematically evaluate a given body of literature (Ginsberg & Venkatraman, 1985). Moreover, as a comprehensive, structured and analytical means of accurately organising reviews, SQLR effectively identifies research gaps in the literature (Klassen et al., 1998; Paul & Criado, 2020). Widely adopted in the broad social sciences (Tranfield et al., 2003) and in management and marketing research (Christofi et al., 2021; Paul & Feliciano-Cestero, 2021), SQLR offers several benefits, including the ability to construct flexible databases of articles that can easily be updated and interrogated (Pickering & Byrne 2014). Moreover, a SQLR was chosen over other literature review approaches because it displays several advantages, including: 1) objectivity; 2) replicability; 3) capability to assess the presence/absence of research in a specific topical area (see Tranfield et al., 2003).

Furthermore, bibliometric mapping is a method that introduces a statistical evaluation of academic connections across publications (Pritchard, 1969), providing a clear picture of the most relevant topics under analysis (in our case, social customer relationship management). This method has been commonly adopted in the management literature (Mariani & Borghi, 2019; Zupic & Čater, 2015) and the benefits include the ability to provide visualisation maps based on the most cited papers, presenting insights for current research concerns and guidelines for upcoming research (Jones & Gatrell, 2014).

3.1. Data

Data was gathered from Scopus, one of the most comprehensive sources of indexed academic work. The database covers works published since 1966, indexing 12,850 journals in physical sciences, health sciences, life sciences and, of course, social sciences (Archambault et al., 2009). Scopus was chosen over Web of Science (WoS) for two reasons. First, as scholars face a trade-off between data coverage and cleanliness, Scopus has been found to have a more extensive coverage (60% larger) than WoS (Zhao & Strotmann, 2015). Second, systematic quantitative literature reviews and bibliometric studies in the social sciences field typically leverage only one database (e.g., Galati & Bigliardi, 2019) in light of data homogenisation issues faced when working with multiple databases. Data for this study were collected in April 2021, with the search limited to articles published up to this date.

Google Scholar was purposefully not used for a number of reasons. First, in line with recent systemic literature reviews (SLRs) in the social sciences, Scopus and WoS index most of the scientific production written in English and Spearman correlations of citation counts between Google Scholar and WoS/Scopus are strong across all subjects (Martín-Martín et al., 2018). Second, the Scopus database coverage is considered suitable for this type of literature review (Wang & Waltman, 2016). Third and last, unlike Scopus (and WoS), Google Scholar does not provide any user application programming interface (API) to collect documents and conduct bibliometric analyses. Moreover, Google's policy does not allow automatic downloads. Finally, Google Scholar includes everything that can be found via a computerised process (crawling), which means that there is no quality control evaluation on the publication outlets: this makes the content gathered through Scopus superior (in terms of quality and scientific reliability) to the content gathered through Google Scholar (Halevi et al., 2017; Zupic & Čater, 2015).

To search the databases, we first identified a set of keywords related

to social customer relationship management. In line with other SQLRs, based on developing a data extraction protocol/sheet (Kraus et al., 2020; Tranfield et al., 2003), the four co-authors (experts in the subject) identified, independently, a comprehensive list of meaningful keywords which covered the topic being researched. At a later stage, the lists were compared until an agreement (with the inter-rater agreement above 99%) between the co-authors on all keywords was reached. This way, the final list of keywords used was considered appropriate to gather the greatest number of relevant articles for the SQLR.

More specifically, the keywords identified entail: 'social CRM', 'social customer relationship management', 'CRM 2.0′, 'eCRM', 'SCRM'. Several previous systematic reviews focusing on the broader domain of CRM have been carried out (e.g., Ngai 2005, Sota et al. 2018, Wahlberg et al. 2009). As such, it was important to delimit the focus our review to those papers discussing CRM developments that have taken advantage of the social connections and networking opportunities afforded by Web 2.0 (Faase et al. 2011). Nevertheless, we broadened the scope of the keywords to reflect the nascency of the field and variation in terminology in use. The seminal work in this area, published by Greenberg (2010a), used the term CRM 2.0. His subsequent work (Greenberg 2010b) and that of others used social CRM/Customer relationship management, sometimes abbreviated to SCRM. Social and CRM was used to pick articles that combined discussion of social media with CRM, without necessarily referring the emerging domain. We also used E-CRM (electronic crm) as a search term. Again, this was chosen to pick up articles discussing new functionalities introduced since CRM initial inception to take advantage of digital and social channels.

We ran a query using a combination of all the aforementioned keywords (adopting the Boolean operator 'OR') in the fields related to 'articles', 'abstract' and 'keywords'. We took into account works published until April 2021. The search yielded a total of 835 works. After excluding proceedings, book chapters, books and editorial material not published in English, and confining the search to the subject areas 'Business, Management and Accounting', 'Decision Sciences', 'Economics, Econometrics and Finance', 'Social Sciences', the search yielded 305 outputs. Out of the 305 outputs, there were some articles related to SCRM, where the term was used in the context of 'Supply Chain Risk Management' – articles not connected to social CRM were excluded as part of our disambiguation process – leaving us with a sample of 142 outputs. The overall data gathering process is illustrated in Fig. 1.

3.2. Data analysis methods

Our aim is to present a clear picture of SCRM's most relevant topics and aspects. To provide a systematic review, we used a bibliometric approach, and we implicitly proxied productivity through the number of publications and popularity through the number of citations. Moreover, we moved a step forward and conducted data analysis using bibliometric mapping (e.g., co-citation, co-occurrence and bibliographic coupling) that utilises bibliographic data extracted from databases to create structure maps of scientific fields (Zupic & Čater, 2015). Bibliographic coupling is a technique that measures the similarity between documents by capturing the number of shared references (Kessler, 1963). The references cited in an article help explain the topic. Therefore, articles citing the same references are linked (Perianes-Rodriguez et al., 2016). Such analysis has been widely adopted in the literature (Mariani & Borghi, 2019), as it is considered a beneficial technique to evaluate data through mapping extant research (Boyack & Klavans, 2010). Hence, we deemed the bibliographic coupling analysis of documents, authors and journals an appropriate approach to present a clear picture of the evolution of scientific production on the focal topics of social CRM. We employed the VOSviewer package of Van Eck and Waltman (2009) to generate bibliometric maps, widely adopted in the literature (e.g., Apriliyanti & Alon, 2017; Ferreira, 2018). The mapping technique used (VOS) did not involve multidimensional scaling as it is a superior method to use to build bibliometric maps (Van Eck et al., 2010).
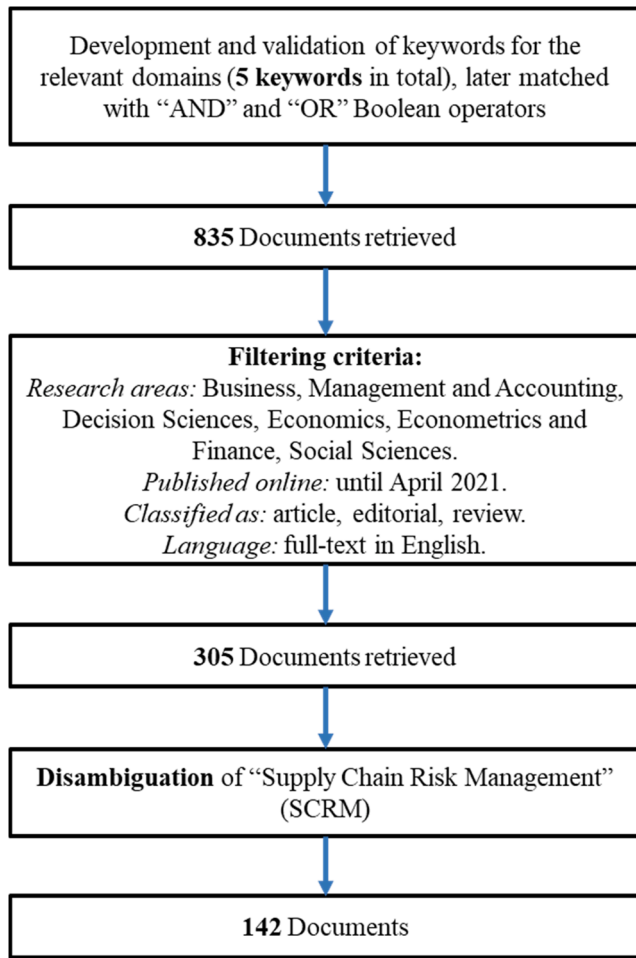
Fig. 1. Data-gathering process.

After bibliographic coupling, the database of outputs was examined in relation to the following criteria: type of paper (conceptual vs. empirical), main topic, subtopics, methods (quant, qual, mixed), data structure (cross-sectional, panel, longitudinal), empirical setting (geographic region and country), variables, sample size and level of observation (micro-individual, *meso*-organisational, macro).

We next provide a descriptive analysis of our samples (obtained through the SQLR queries) and then present the findings of the bibliometric analyses.

4. Analysis and findings

4.1. Publication trends

To answer RQ1 (*What is the current publication trend in social CRM?*) we analysed the publication trend in social CRM using total publications by year, country, journal, contributing author and organisation. The following sections discuss our findings.

The earliest publication related to the use of social media for customer relationship management dates to 2003. This is in line with changes in online environments driven by Web 2.0, where technological advances in web development led to the facilitation of user-generated content online (Kaplan & Haenlein, 2010). Some of the more prominent social media platforms (e.g., Facebook, Twitter, YouTube) emerged in early 2000 and companies started to engage with consumers in these environments, as other marketing channels decreased in effectiveness as consumers spent more time on these platforms (Fournier & Avery, 2011). Fig. 2 illustrates the cumulative growth of publications (on how

Table 1
Top publishing countries on social CRM by citation and number of documents.

| Rank	Country	Citations	Rank	Country	Documents
1	United States	2197	1	United States	33
2	Hong Kong	389	2	United Kingdom	18
3	Germany	368	3	India	13
4	United Kingdom	347	4	Australia	10
5	France	340	5	Indonesia	7
6	Australia	337	6	Hong Kong	6
7	Bangladesh	145	7	Spain	6
8	India	92	8	Thailand	5
9	Spain	85	9	United Arab Emirates	3
10	Netherland	72	10	Germany	2
11	Indonesia	71	11	France	2
12	Austria	68	12	Bangladesh	2
13	Sweden	58	13	Netherland	2
14	United Arab Emirates	48	14	Austria	2
15	Thailand	42	15	Sweden	1
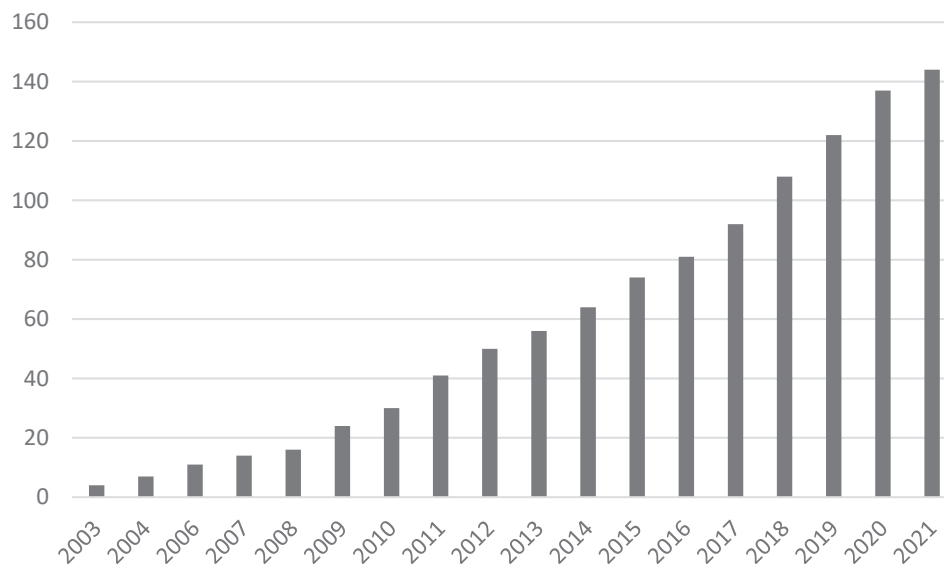
Fig. 2. Cumulative publications on social CRM (2003–2021).

social media can be used to manage customer relationships) since 2003.

Social CRM has captured the interest of researchers across the globe. Table 1 illustrates the countries that have gathered the most citations and those that have published the most documents. At the top, we observe that the United States leads the table for both categories. The top three publishing countries in Europe are the United Kingdom, Spain, and Germany. On the other hand Asia, India, Indonesia, and Hong Kong dominate in terms of publications, Hong Kong, Bangladesh and India top citations to their work.

Based on our dataset, 313 authors from 277 organisations have published on topics related to social CRM. Table 2 summarises the top contributing authors and organisations. As shown in the table, Paul Harrigan published the most articles on the topic (five, with 199 citations), followed by Muhammad Anshari. The most active organisations in this field were the Indian Institute of Technology Kharagpur and the University of Nicosia, with four and three publications, respectively. Third, was the Northern Arizona University with three documents and 500 citations. It is worth noting that other institutions with only one document have achieved greater impact, mainly for those institutions in North America and Western Europe.

In terms of the outlets where research in this area has been published, we note that articles published in the *Journal of Interactive Marketing*, the *Journal of Business Research* and the *Journal of Database Marketing and Customer Strategy Management*, are the ones that have achieved the most citations. Table 3 summarises the top 10 journals with the most citations.

In terms of methods used, we identified a preference toward quantitative approaches (42.96% of the papers), followed by conceptual work (24.65%), qualitative papers (17.61%), papers using a mixed methodology (7.04%), and literature reviews (6.34%) (see Fig. 3). In addition, most of the studies followed a cross-sectional approach (48%) (see Fig. 4).

4.2. Influential articles on social CRM

Our second research question aims to identify the most influential articles on social CRM. To address this question, we analysed the citation networks of 144 articles by conducting a citation network analysis. Citation network analysis allows us to measure an article's impact by using the number of citations by other works. Table 4 shows the top research publications by the number of citations. From this analysis, we established that the work of Trainor et al. (2014), examining the use of social media to enhance the capability of organisations to manage customer relationships, has been highly influential in this field. This

study conceptualised the use of social media and customer-centric management systems as factors that help organisations build social CRM capabilities and, ultimately, improve their performance. They tested their framework across organisations in different industries. Another notable work was Malthouse et al. (2013), which conceptualises how social media transformed more traditional core areas within CRM systems.

4.3. Established and emerging themes in social CRM

Our third research question aims to identify which themes involving social CRM were the most popular and emerging among academic research? In order to answer this research question, we conducted a co-citation analysis to identify the established themes and keyword co-occurrence analysis to determine the emerging ones. The co-citation analysis of cited references shows the relatedness of items based on the number of times that they are cited together. Based on this analysis, we have identified three main influential themes and their respective papers from which the social CRM literature has been developed. Fig. 5 shows the results of our co-citation analysis using cited references as a unit of analysis. These themes are: (1) CRM impact on performance, (2) social media capabilities and CRM, and (3) CRM and strategic use. The interaction among the established themes is illustrated by Fig. 6. The following sections examine these themes in more detail.

Table 3
Top 10 journals by number of citations.

Journal	Articles	Total number of citations
Journal of Interactive Marketing	2	431
Journal of Business Research	3	395
Journal of Database Marketing and Customer Strategy Management	5	244
Business Process Management Journal	2	127
International Journal of Electronic Customer Relationship Management	7	118
MIS Quarterly: Management Information Systems	2	62
Journal of Direct, Data and Digital Marketing Practice	6	61
International Journal of Contemporary Hospitality Management	3	53
Electronic Markets	2	50
Journal of Research in Interactive Marketing	2	36

Table 2
Top publishing authors and institutions on social CRM.

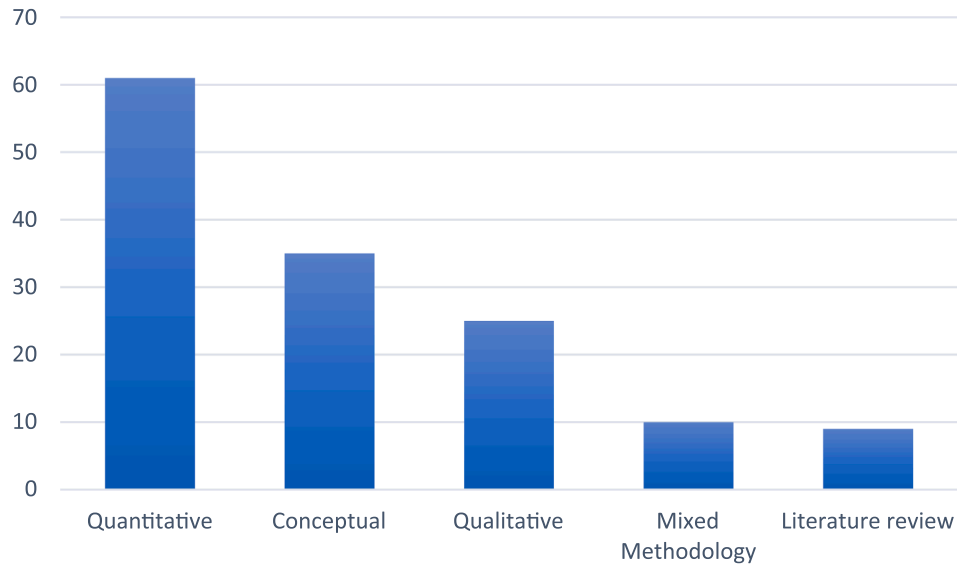| Author	Documents	Citations	Organisation	Documents	Citations
Harrigan	5	199	Indian Institute of Technology Kharagpur, India	4	24
Anshari	4	40	University of Nicosia, Cyprus	3	20
Agnihotri	3	424	Northern Arizona University, United States	2	500
Ang	3	100	University of Macau, Macau	2	19
Fongsuwan	3	26	Universiti Brunei Darussalam, Brunei	2	14
Sigala	3	59	University of Glasgow, United Kingdom	2	6
Trainor	3	538	King Mongkut's Institute of Technology Ladkrabang, Thailand	2	26
Vrontis	3	20	University of Alabama, United States	1	357
Ahuja	2	16	Ohio University, United States	1	357
Alavi	2	16	ESCP Europe, France	1	338
Budiardjo	2	28	Goethe University, Germany	1	338
Chan	2	19	Hong Kong University of Science and Technology, Hong Kong	1	338
Chatterjee	2	12	Northwestern University, Evanston, United States	1	338
Chaudhuri	2	12	Roland Berger, Germany	1	338
Chen	2	51	The IBM Institute for Business Value, United States	1	334
Chen	2	51	Manassas, Virginia, United States	1	201
Choudhury	2	145	The Customer Framework, United Kingdom	1	98
Dewnarain	2	29	De Montfort University, United Kingdom	1	98
Fang	2	25	Oklahoma State University, United States	1	96
Fjermestad	2	158	New Jersey Institute of Technology, United States	1	96

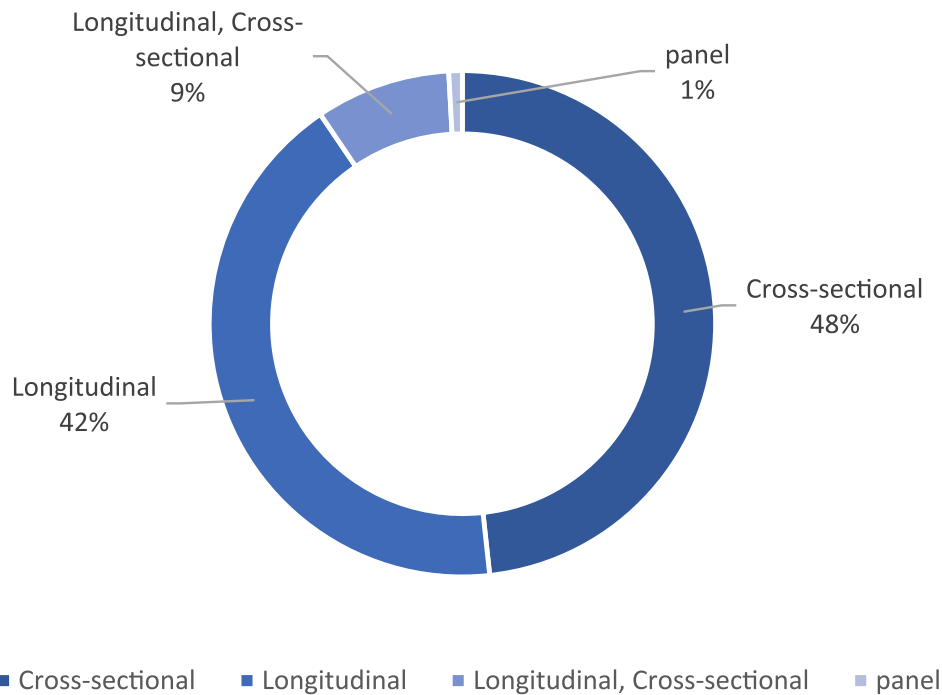**Fig. 3.** Distribution of methods used in selected studies.

Fig. 4. Distribution of data structure used in selected studies.

4.3.1. CRM and impact on performance

The relationship between CRM implementation and performance is an important one as the high rates of failure ascribed to CRM projects have been partly attributed to an absence of clear objectives and the inability of organisations to demonstrate measurable returns on their CRM investments (Foss et al., 2008, Harrigan et al., 2020, King and Burgess 2008, Salesforce, 2021). Scholars of traditional CRM have deployed a broad array of metrics to assess the impact of CRM on organisational performance. These include: **1) Financial or economic measures**. Drawing on the earlier work examining performance outcomes for marketing in general (e.g., Dutta et al., 1999, Vorhies and Morgan, 2003); most studies focus on perceived financial performance (or close approximations) (Boulding et al., 2005). These include measures such as market share, sales growth (from existing and new

customers), customer growth, profitability/ROI relative to competition, cost reduction, revenue generated from new products and attainment of financial goals (e.g., Chang et al., 2010, Coltman, 2007). Exceptionally, scholars have incorporated objective measures of financial performance (actual sales, costs and profitability) (e.g., Reinartz et al., 2004, Ryals, 2005). **2) Non-financial/non-economic**. The focus here has been more on measures of marketing effectiveness such as customer satisfaction (through tailored communications, service, and support) as well as relational outcomes such as longevity of relationship, customer loyalty, commitment, and retention (Boulding et al., 2005, Jayachandran et al. 2005).

Social CRM scholars have largely followed Jayachandran et al's (2005) lead, focusing on a narrower range 'customer relationship performance' measures, such as retention, loyalty, and satisfaction

Table 4
Top 20 cited articles.

Author(s)	Citations
Trainor, Andzulis, Rapp and Agnihotri (2014)	357
Malthouse, Haenlein, Skiera, Wege and Zhang (2013)	338
Baird and Parasnis (2011)	334
Greenberg (2010a)	201
Trainor (2012)	143
Woodcock, Green and Starkey (2011)	98
Fjermestad and Romano (2003)	96
Wang and Kim (2017)	93
Choudhury and Harrigan (2014)	88
Ang (2011)	79
Padmanabhan and Tuzhilin (2003)	72
Liu, Burns and Hou (2017)	71
Faase, Helms and Spruit (2011)	62
Scullin, Fjermestad and Romano (2004)	62
Sophonthummaphan (2009)	58
Harrigan, Soutar, Choudhury and Lowe (2015)	57
Padmanabhan, Zheng and Kimbrough (2006)	51
Bernabé-Moreno, Tejeda-Lorente, Porcel, Fujita and Herrera-Viedma (2015)	39
Agnihotri, Traino, Itani and Rodriguez (2017)	38
Mladenow, Bauer and Strauss (2014)	38

(Choudhury and Harrigan, 2014; Harrigan et al., 2020; Trainor et al., 2014). This is justified that on the basis that social CRM's benefits are largely relational: the use of social media for CRM benefits the organisations by enabling them to have better conversations with customers and strengthen engagement leading to stronger, longer lasting relationships (Keitzmann et al., 2011; Trainor et al., 2014; Woodcock et al., 2011).

Despite the investment many organisations have made in improving their processes and systems to manage information from customer relationships; studies examining the impact of those processes and systems on organisational performance have produced inconsistent results (Chang et al., 2010, Keramati et al., 2010). Several studies indicate that effective deployment CRM systems is dependent on the capability of organisations to capture, process and execute campaigns and strategies using the information and insights that they gather (Chang et al., 2010; Harrigan et al., 2020; Jayachandran et al., 2005; Trainor et al., 2014). According to Chang et al (2010), *marketing capabilities* mediate the 'CRM technology use' performance relationship, where 'CRM technology use' refers to the functionality that a CRM system offers in terms of sales, analytics, marketing, and service support (ibid p. 854). They define marketing capability as, 'an organization's repeatable pattern of actions

to carry out the marketing related needs of the business effectively' (Chang et al., 2010, p.850). Drawing on the earlier work of Vorhies and Morgan (2003), Morgan et al. (2003), and Slotegraaf and Dickson (2004), Chang et al (2010) indicate that marketing capabilities encompass the firm's ability to formulate, plan and implement marketing strategies, including the specialist skills associated with executing marketing mix, including advertising, pricing, and channel management. Moreover, in common with Coltman (2007), the authors posit that superior marketing capabilities are associated with superior performance.

Building on these contributions, recent contributions from Social CRM scholars have, highlighted the role played by *Social CRM capabilities* in the 'social media technology use' performance linkage (Harrigan et al. 2020, Trainor et al. 2014). Trainor et al. (2014) define Social CRM Capability as '*a firm's competency in generating, integrating, and responding to information obtained from customer interactions that are facilitated by social media technologies*' (p. 1202). The authors point to the complementarity between social media technologies usage and customer-centric management systems resulting in superior social CRM capabilities, elevating customer relationship and ultimately firm performance. Social media technology use, which conceptually is like CRM technology use, refers to the functionalities provided the social media tools available to the organisation (Foltean et al., 2019; Trainor, 2012; Trainor et al., 2014). Based on Kietzmann et al. (2011), these include support for sharing, conversations, relationships, and groups (Trainor et al., 2014). Customer-centric management systems refers to the tailoring of business processes and systems towards serving customers (Jayachandran et al., 2005).

Harrigan et al. (2020) extend Trainor et al's work, distinguishing between front and back office Social CRM capabilities, which relate to marketing and sales support and data analytics, respectively, and adapt the concept of relational information processes introduced by Jayachandran's et al. (2005) to focus on the capture, integration, access, and use of information from social media. The authors find that customer relationship these social information processes and Social CRM capabilities, in combination with the initiatives employed to engage customers and the firm's relational orientation, drive relational performance, measured via satisfaction and retention.

4.3.2. Social media capabilities and CRM

As businesses started to engage more actively with consumers on social media channels (Fournier and Avery, 2011), companies began to examine how they could leverage this type of relational information to
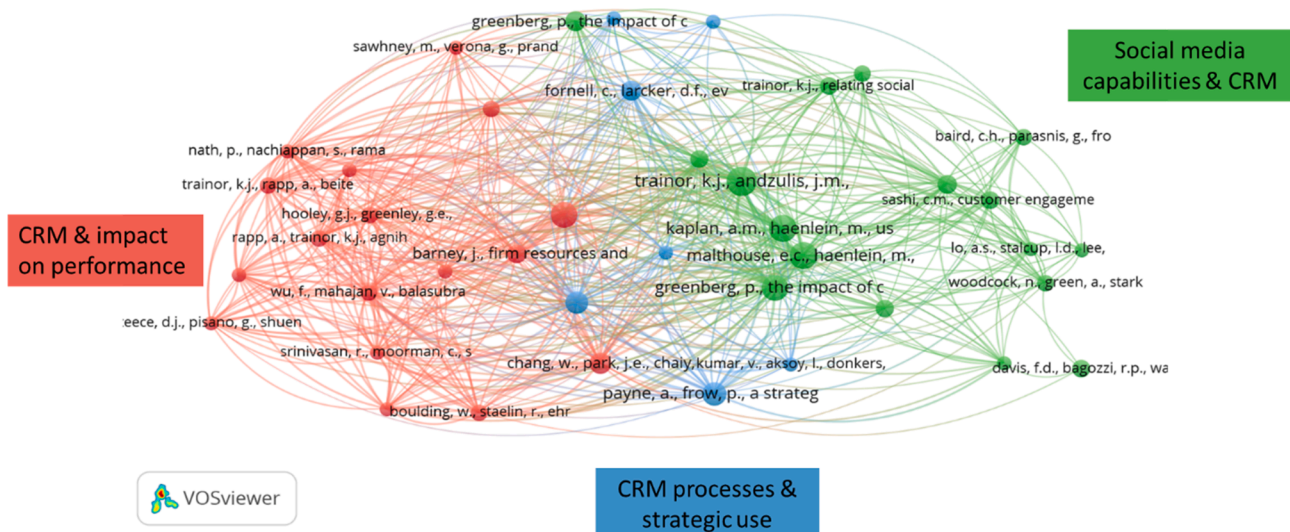

Fig. 5. Co-citation analysis.
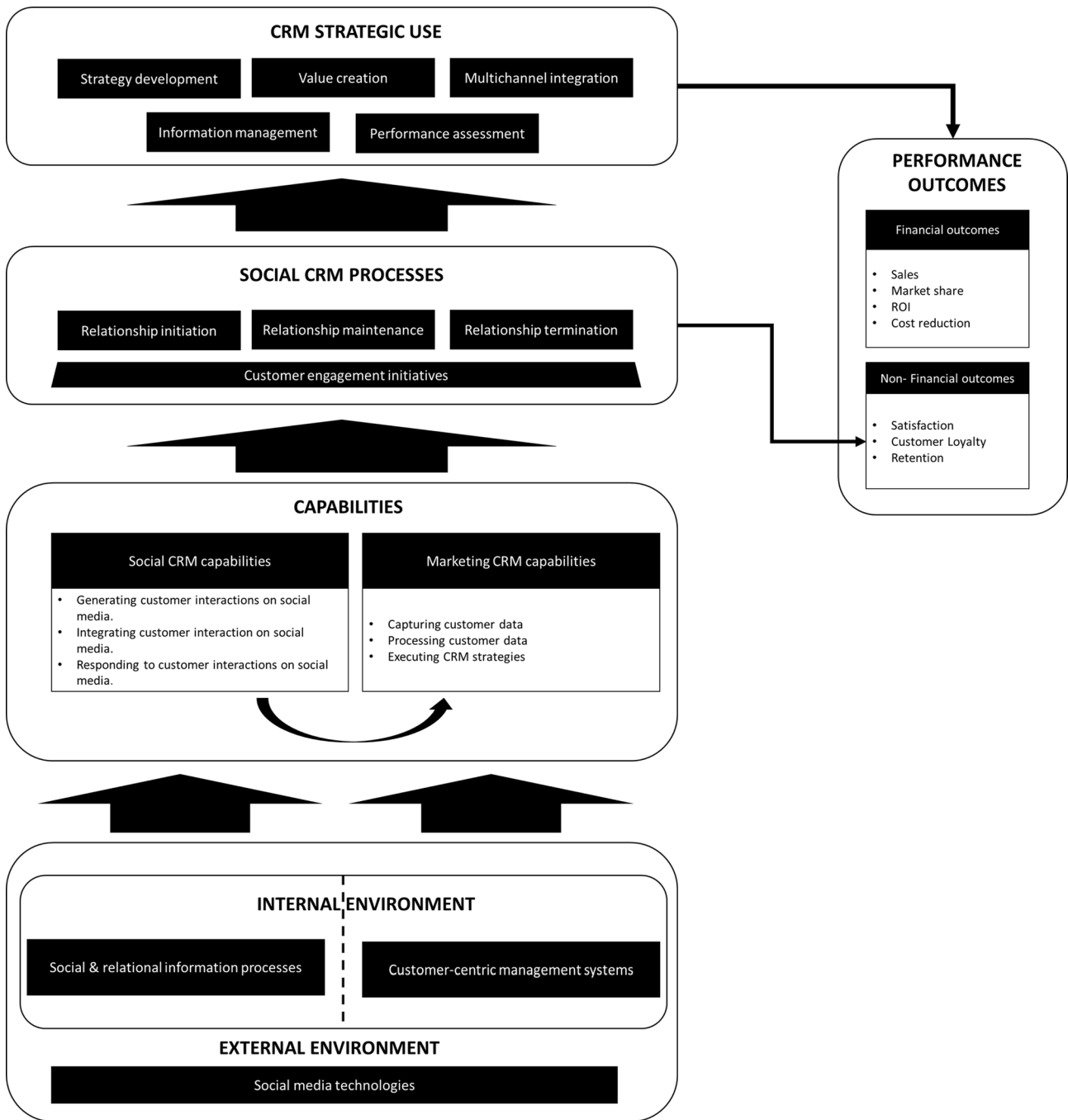
Fig. 6. Conceptual relationships across social CRM themes.

improve their performance outcomes. There was early identification that some social media characteristics posed challenges for businesses to interact with customers. For instance, lack of control over message diffusion, the fact that, unlike traditional CRM systems, social media had unstructured data sets that needed to be manipulated, as well as labour-intensive programs that were needed to interact with customers in real-time in this environment (Malthouse et al., 2013). This highlights a shift in power balance towards the customer (Kaplan and Haenlein, 2010) and the need for companies to adapt to the new demands that customers were presenting on social media channels, but also to derive insights from those interactions to improve their CRM capabilities (Greenberg, 2010).

Kargaran et al. (2016) suggest features of social media such as openness, feedback channel and two-way communication create

affordances in managing customer relationships. For organisations, key social media capabilities included cost effectiveness, speed and ease of use (Kaplan and Haenlein, 2004), offering space for establishing and facilitating mutual interaction (Trainor et al., 2014; Boateng, 2016; Chua and Banerjee, 2013; Kietzmann et al., 2011), sharing of information and knowledge amongst customers between business and customers and within an organisation (Kwahk and Park, 2006; Trainor et al., 2014; Ray, 2014), and initiating and supporting online communities and forums (Zhang, 2015; Trainor et al., 2014).

4.3.3. CRM processes and strategic use

The final theme relates to the strategic use of CRM processes, their interactions with an organisation's social media capabilities, and their relationships with performance outcomes. In this theme, Reinartz et al.

(2004) identify three CRM processes that directly impact performance outcomes: relationship initiation, relationship maintenance, and relationship termination. In their work, the most substantial effect on performance comes from relationship maintenance and relationship initiation processes. In both stages, related capabilities include (1) the use of social media for marketing and communication efforts (Kartik et al., 2013), (2) customer engagement capabilities to facilitate firm–customer and customer-to-customer interactions (Gill et al., 2017), and (3) the capability to collect customer data types from social media (Payne & Frow, 2006). However, termination of customers, even when they are not profitable, is also identified as a limitation of managers. A question that emerges under this theme is whether non-human decision-makers would make those termination decisions more systematically. At a meso level, Payne and Frow (2005) argue that a cross-functional, process-oriented approach to CRM is presented. Their work identifies five cross-functional processes that will allow for strategic use of CRM tools: strategy development process, a value creation process, a multi-channel integration process, an information management process, and a performance assessment process.

4.3.4. Emerging themes

To identify the emerging themes in the literature, we conducted a keyword co-occurrence analysis. Keyword co-occurrence determines when two keywords appear together in an article, indicating a relationship between the two concepts. In addition, previous bibliometric work has looked at keyword co-occurrence analysis as an input to determine the article's content (Comerio & Strozzi, 2019), which can indicate the main themes present in a particular area of knowledge. For example, Table 5 illustrates that social CRM, social media, and customer relationship management are the top three keywords mentioned in the social CRM literature. This is expected as social CRM integrates data from social media into CRM systems. Fig. 7 shows how keywords relate to each other and the popularity of each of those keywords over time. It is notable that themes which relate to data mining and electronic commerce are more prevalent early on, while emerging themes are related to big data, performance, and customer engagement.

Table 5
Top keywords by frequency of their occurrence.

Keywords	Occurrences
Social CRM	44
Social media	42
Customer relationship management	31
CRM	29
Customer satisfaction	13
Relationship marketing	13
Sales	13
Electronic commerce	11
Public relations	11
Social customer relationship management	11
Customer engagement	10
eCRM	10
Social networks	10
Customer relations	8
Customer relationship management (CRM)	8
Social networking (online)	8
Web 2.0	8
Information technology	6
Dynamic capabilities	5
Social networking	5
Customer retention	4
Electronic customer relationship management	4
Facebook	4
Internet	4
Social media marketing	4
Technology	4

5. Theoretical lenses

One of the main limitations of theme-based bibliometric reviews is that the focus tends to be on citation relationships (Paul, Lim et al., 2021). In order to overcome this limitation, an analysis of the theoretical lenses used by the manuscripts in the review was conducted. We performed a keyword analysis of the abstracts to identify the top theories mentioned. In total, 17 theoretical lenses emerged from our analysis. The top five lenses that were mentioned by more than one paper are listed in Table 6. The following section examines these theories and how they have been utilised in the context of social CRM.

5.1. Dynamic capabilities theory

The dynamic capabilities theory posits that the environments where organisations compete are dynamic, and that firms possess different capabilities by which they acquire and deploy resources. As a consequence of these variations, the performance of firms varies over time (Eisenhardt & Martin, 2000). The theory also acknowledges the dynamic nature of capabilities, and that firms can implement different strategies to adapt to changes in their environment. This is achieved by combining and transforming available resources in a creative way (Morgan et al., 2009). In the context of social CRM, the theory has been used to assess how the development of capabilities to generate, integrate and respond to information obtained from customer interactions on social media can impact on higher levels of customer engagement, and, ultimately, firm performance (Wang & Kim, 2017). In a similar vein, Harrigan et al. (2020) found that both front office social CRM capabilities (e.g., communication and information provision through social media) affect customer engagement initiatives, while back office social CRM capabilities (e.g., collecting customer data through social media) affect social information processes related to capturing, integrating, accessing and using social media customer data. Both customer engagement initiatives and social information processes act as antecedents to customer relationship performance.

5.2. Resource-based view theory

The resource-based view theory explains how a firm uses a bundle of resources to sustain and maintain a competitive advantage (Rapp et al., 2010). Under this view, the resources are valuable and inimitable, and are composed of assets, knowledge and processes that enable the firm to implement strategies that improve efficiency and effectiveness (Barney, 1991). Closely related are the firm's capabilities, which are defined as a firm's ability to assemble, integrate and deploy valuable resources, in combination, to achieve superior performance. As a consequence, many of the papers in our review combined both the dynamic capabilities theory and the resource-based view theory to explain how SCRM can be a source of competitive advantage (e.g., Harrigan et al., 2020). Notable studies that used this theoretical underpinning are the work of Choudhury and Harrigan (2014), where social media technologies are conceptualised as being resources that organisations can use to elicit customer engagement in social media settings. In addition, the use of social media for CRM use requires the development of certain capabilities of information capture, information integration, information access and information use in a social media context.

5.3. Technology, organisation and environment

The technology, organisation, and environment (TOE) framework stems from the process of innovation literature, by focusing on one specific segment of this process – how the firm context affects the adoption and implementations of innovations (Baker, 2012). The theory places itself within the meso level and examines the firm's technology and organisational context, as well as the environment in which it operates. The technological context considers all the technologies that

Fig. 7. Keyword co-occurrence network on social CRM over time.

Table 6
Theoretical lenses in social CRM.

Ranking	Theoretical lens	Sample papers
1	Dynamic capabilities theory	Wang and Kim, 2017
2	Resource-based view theory	Choudhury and Harrigan, 2014
3	Technology, organisation and environment (TOE)	Chatterjee et al. 2020
4	Technology acceptance model (TAM)	Askool and Nakata, 2011
5	Diffusion of innovation (DoI) model	Hasani and O'Reilly, 2020

are available to the firm, regardless of whether they are in use or not by the firm. The organisational context considers the resources that the firm has, including structures between employees, intra-firm communication processes, firm size and the extent of idle resources. Finally, the environmental context looks at the structure of the industry, the availability of technology suppliers, and the regulatory environment where the firm operates. In the context of SCRM, Chatterjee et al. (2020) examined how several factors, informed by the TOE framework, determined actual use of SCRM within organisations, as well as their impact on business benefits. Their findings suggest that technological competence, environmental characteristics, leadership support and the organisational environment, all impact on the actual use of SCRM, which, in turn, mediates the business benefits of using these platforms. They did not find any significant effects on trust on SCRM, and they argue that this is because not all employees within the organisation would know about the functionalities and capabilities of the SCRM systems. In a similar vein, Marolt et al. (2020) also found that aspects of each of these three contexts determine the intensity of SCRM adoption and, ultimately, customer relationship performance. One of the main advantages for scholars who are looking to explain the adoption of social CRM through the TOE framework, is that it considers the impact of several contexts, including environmental ones (Al-Omoush et al., 2021). Other theoretical lenses discussed in this section, look inwards (e.g., TAM, DoI).

5.4. Technology acceptance model

The technology acceptance model (TAM) is one of the most widely used frameworks that explain the adoption of new technologies (Acik-goz & Perez-Vega, 2021). The framework developed by Davis (1989) identifies perceived ease of use (PEOU) and perceived usefulness (PU) as constructs that explain attitudes towards a technology, and the intentions to adopt that technology. Studies in the context of SCRM that have used this theory, have used it as enabling theory to explain adoption of social CRM systems among organisations (Askool & Nakata, 2011) and consumers (Nedra et al., 2019). In the case of the organisation perspective, Askool and Nakata (2011) extended TAM to also consider elements of perceived trustworthiness of SCRM platforms, driven by extrinsic capabilities such as the ease to participate, network and collaborate in the Web 2.0, as well as intrinsic factors such as familiarity, care and information sharing. On the other hand, Nedra et al. (2019) extended TAM by including social identity factors and perceived pleasure as determinants of intention to follow brands on social media and engage in their SCRM programmes. Their findings support the theory, as both PEOU and PU were found to affect the attitude formation towards following brands on social media, but PU did not have a direct relationship with intentions to follow brands on social media. Instead, social identity and perceived pleasure did show a direct relationship with the intentions to follow brands on social media and participate in SCRM activities.

5.5. Diffusion of innovation model

The diffusion of innovation (DoI) model aims to explain the process that an innovation follows when it spreads across different channels and through members of a system (Rogers, 2003). Within consumer and business research, the DoI theory is used to explain how, why and in what rate new ideas and technologies are adopted among different people and organisations. In relation to SCRM, Hasani and O'Reilly (2020) used the DoI as an enabling theory to identify factors affecting

successful adoption of SCRM technologies. Interestingly, their work combined some of the theories discussed in this section (e.g., TAM and TOE) with the DoI model. In their model, Hasani and O'Reilly (2020) integrated enablers of innovation mentioned in the DoI model (i.e., perceived advantage, compatibility, observability, trialability) as technological characteristics that can have an impact on marketing performance, derived from the use of SCRM systems. Their findings supported that factors identified by the DoI are determinants of positive marketing performance.

6. Future areas of research and limitations

This section aims to answer *RQ4: What are future research areas in the field of social CRM?* To answer this question, we developed on the gaps that we identified by conducting a systematic review of the literature, a bibliometric analysis and the identification of the theoretical lenses used to advance knowledge in this field.

What is the impact of social CRM on firm performance?

Payne and Frow (2005) highlight that a strategic view of CRM involves recognising that the over-riding purpose of CRM is to enhance value for shareholders. Moreover, mechanisms need to be deployed to adequately assess performance outcomes in terms of various forms value creation (e.g., customers, employees and shareholders) as well as cost savings. This literature review demonstrates that more work is needed to understand the (Social) CRM-performance relationship and develop a clearer consensus regarding the type of performance metrics that should be employed.

Several previous studies show a link between CRM implementation and firm performance (Coltman, 2007; Boulding et al., 2005). This systematic review has highlighted similar linkages, as well as more recent contributions from Social CRM scholars demonstrating linkages to relational performance (e.g., satisfaction and retention). The precise nature of this relationship, however, warrants further investigation, with authors highlighting a range of potential intervening variables.

The range of relational outcomes deployed by SCRM studies could be usefully expanded to examine the impact of SCRM implementation on relationship quality and key relational constructs such as trust as well as commitment. Furthermore, it would be valuable to explore whether these variables act as mediators in the SCRM implementation – firm performance relationship, building on seminal contributions in the relationship marketing domain (e.g., Morgan and Hunt, 1994) and more recent contributions attempting to synthesise the factors contributing to relationship marketing success (e.g., Palmatier et al. 2006). Firm level as opposed relational performance has, hitherto, been neglected in SCRM studies and it would be valuable to examine a range of financial and non-financial outcomes.

Some of the research covered by this review have already tried to place relational constructs as antecedents of adoption of social CRM (see Chatterjee et al., 2020) without evidence of direct relationship on adoption. However some of these relational constructs have been found to mediate adoption and usage of other technologies (Singh and Sinha, 2020).

In a similar vein, it would be valuable to understand how SCRM implementation impacts relational outcomes such as word of mouth, referrals, continuity expectations, customer loyalty and lifetime value (DeMatos et al. 2008; Hennig-Thurau et al., 2002). In addition, non-relational constructs such as technology readiness (Parasuraman, 2000) could provide additional insights that explain the adoption and continuance usage of the technology among firms. In particular, the construct of technology readiness captures aspects of awareness of the capabilities of the technology as well as the individuals technology-related beliefs (Parasuraman and Colby 2001).

It would also be valuable to explore SCRM outcomes from a consumer perspective, a dimension that is under-explored in previous studies. This unbalanced focus towards the firm was also reflected by the analysis of the theoretical lenses used in the studies covered in this review, with most of the theories used having the organisation as the main unit of analysis. The nature of consumer relationship derived from the relationship efforts of commercial enterprises attracted much debate when articles appeared on the topic of relationship marketing, with some authors questioning whether commercial encounters with consumers could be deemed relationships at all (Barnes 1994, O'Malley and Tynan 2000; Pels, 1999) and the contexts within such relationship could arise (Christy et al. 1996). Recent contributions suggest creation and maintenance of relationships in consumer markets remains contested terrain (Alshurideh, et al. 2016; Frow, 2011; Mitussis et al. 2006; Nguyen, et al. 2020. It would be useful to carry out further research to investigate consumers' perceptions of social customer relationship management efforts (see, for example, Mithas et al. 2005) and associated ethical (Cosgrave and O'Dwyer, 2020) and "dark-side' implications (Nguyen et al. 2020). Allied to this, it is beneficial to explore the constructs used by consumers to describe and evaluate their interactions and encounters with organisations via SCRM and which of these are used to differentiate between good/close/distant/casual/meaningful encounters to derive an additional perspective on what makes for successful consumer relationships in a SCRM context. The repertory grid technique, for example, would be a useful methodological tool in this context (Fransella, et al., 2004; Lemke et al., 2011).

How can companies leverage big data resources and machine learning capabilities to improve customer relationships by integrating data from social media in real time and from stored relational information? How can they improve consumers' trust in these systems?

One of the main advantages of social CRM capabilities is that companies have to interact with customers in a more collaborative, transparent and conversational way through social media (Acker et al., 2011). Consumer data generated in social media tends to be unstructured big data, and the integration to existing social CRM processes can help draw more accurate conclusions on company-customer processes and interactions (Orenga-Roglá & Chalmeta, 2016). In line with the resource-based view theory from which social CRM adoption has been explained, big data and machine learning technologies emerge as a resource that companies can use to achieve competitive advantage (Wang & Kim, 2017). This will be contingent to the development of new capabilities, either internally to integrate and respond to the information generated by these resources, or externally by the development of new tools that enable organisations to collect and analyse customer big data for decision-making and improved customer communication. Furthermore, the keyword co-occurrence analysis has shown a growing interest among academic research on the use of big data in the context of CRM and SCRM. Looking at how big data can be integrated from social media to existing social CRM systems, academics have argued that improvements in machine learning technologies can improve the outcomes of integrating live social media data with existing CRM systems (Perez-Vega et al., 2021). This can lead to real-time responses from companies to improve customer engagement and enhance a firm's capability to identify and attract new customers, plus retain and avoid customer churn (Chagas et al., 2020). However, empirical academic research in this area remains limited. Some companies are already experimenting with this type of technology, customising the responses they give to customers that are likely to terminate their relationships with the brand (e.g., Feedbackly).

From a consumer perspective, more extensive data integration into SCRM systems could help consumers navigate online shops based on their affective preferences, saving time and supporting better purchase decisions (Wang et al., 2018). This could help with some of the challenges that consumers face when making purchase decisions where they encounter information overload (Chen et al., 2009) and limited processing abilities (Gao et al., 2012). However, more research on enhancing consumer trust and the perceived value of these recommendations (while reducing information overload), could help the brand improve the overall customer experience. Consumer trust in systems that employ user-generated content, like online reviews, decrease as

fake and spam comments are prevalent in these types of sites (Filieri et al., 2015). So, identifying the mechanisms that moderate consumer trust in big data-informed SCRM systems, can ensure that the perceived value of these systems improves.

How can social media help decision-making for termination processes? Can technology also help make those decisions for managers?

The termination element is often neglected in the drive to build and maintain customer relationships (Tahtinen & Halinen, 2002). Yet, in the context of the strategic management of the customer, the portfolio necessitates making decisions about customer relationships to invest in and avoid or divest (Johnson & Selnes, 2004; Thakur & Workman, 2016). While it is generally true that the longer a customer is retained, the more profitable they will become (Reichheld & Sasser 1990), some customers will be neither profitable in the short or long term because of the mix of products they purchase and how much they cost to service (Storbacka et al., 1994; van Raaij et al., 2003). Moreover, careful management of the termination process is essential to avoid adverse outcomes such as negative word of mouth and to ensure that future opportunities for interaction are not closed off (Tahtinen & Halinen, 2002). Thus, in the context of a life insurance offer, the termination of a relationship around the maturation of one policy, gives rise to a new relationship around savings and investment products and a focus on operational efficiency in the termination process (which may lead to missed opportunities for future sales). Terminating relationships and the exit process (Stewart, 1998) demands attention in all forms of CRM and exploring the potential for the use of SCRM tools in predicting relationship profitability and the likelihood of exit, as well as managing the process in an effective empathetic manner, represent worthy avenues for future research.

Exploring the relationship dissolution or termination process has received limited attention in SCRM and wider CRM literature from a consumer perspective. The ending of employment relationships via electronic channels is a controversial topic and one that has received significant press attention over recent years (e.g., Chapman, 2020), and some social customer service initiatives have been accompanied by high-profile failures (Channel 4, 2013; Donnelly, 2021). For example, it would be valuable to use qualitative research and case studies to explore consumer experiences of the dissolution of relationships using social media and other electronic channels and how this was managed in relation to type, modality of supporting channels of communication, as well as the ethical dimensions and perceived fairness of these processes and the eventual outcomes. The use of technologies such as AI to predict customer relationship profitability and technology – and automated processes to select, service and deselect customers – can only increase in the future. Further research is needed to examine the efficacy of such methods and their impact on consumers to drive future SCRM strategies and tactics.

How can social CRM systems derive insights from social data when social media platforms restrict access to information? How can companies deal with privacy concerns derived from the usage of social data?

Social CRM systems rely on the availability of social data from consumers. However, social media platforms have been criticised for the amount of data they acquire from consumers and how it is used. A notable example has been the revelation that Facebook supplied identifiable information of 87 million users to Cambridge Analytica, which was used to improve marketing communication activities in several countries for political purposes (Wang et al., 2018). Social CRM systems depend on application programming interfaces (APIs) to automate and integrate social data with existing CRM systems. Social media APIs are necessary infrastructures that facilitate the trace, manipulation and transfer of social data online (Venturini & Rogers, 2019). However, as privacy concerns on social media grow (Di Minin et al., 2021) and as regulation about the amount of data held is leading to the closure of access to information through social media APIs (Venturini & Rogers, 2019), more research is needed into how the field of social CRM can deal

with these limitations that threaten the value of social data to improve CRM systems.

From a consumer perspective, research on how to deal with privacy concerns and communicate the value of sharing social data through APIs, could counteract some of the limitations derived from the diminishment of available data through this channel. Furthermore, extending our current knowledge around the role of trust and privacy concerns with the use of CRM systems to SCRM (Dehghanpouri et al., 2020), while also taking into consideration consumer digital literacy, can lead to more clarity on how firms could mitigate some of the privacy concerns derived from the use of social media data.

We acknowledge there are some limitations to our study. The first limitation is that our data set was collected in a cross-sectional way until April 2021. As this systematic review has demonstrated, SCRM is rapidly gaining attention and we anticipate that more studies will be published which will not be captured by our analysis. We aim to mitigate this limitation by being transparent about our methodology – in particular, the keywords and database used for new studies to extend our work in the future. A second limitation was the use of VOSviewer to generate our bibliometric analysis and maps. We recognise that other tools (e.g., BibExcel or Sci2) can also be used to conduct this sort of analysis. Researchers have used BibExcel to prepare datasets when they use files not compatible with other tools, like Excel or VOSviewer (Tanudjaja & Kow, 2017). In our case, because VOSviewer supports datasets extracted from Scopus, this software was preferred.

7. Conclusion

The use of social media data to improve customer relationships has led to SCRM becoming a growing area of research among academics. Conversely, firms looking to integrate social media data to improve customer relationships and business outcomes, continue to experiment with new applications and solutions. This literature review aims to highlight the main themes that have emerged from the literature on SCRM and to identify emerging gaps and avenues to help guide future academic research in this field. The following sections outline the key findings of our study and the research contributions and limitations.

7.1. Key findings

The results identified three themes where research in this area is developing: (1) CRM impact on performance, (2) Social media capabilities and CRM, and (3) CRM and strategic use. Another finding from our study relates to identifying new themes emerging in the literature in this field. Notably, our keyword co-occurrence analysis highlighted how new concepts related to Big Data, measurement of performance, and a focus on customer engagement and customer loyalty had been more recently mentioned in selecting keywords from work published in this field. This highlights the evolution that research on social CRM has had from a merely transactional and methodological focus (e.g., early keywords focused on electronic commerce and the process of data mining) to a greater focus on more interactive forms of relationship and the desired outcomes that managers have from social CRM activities (e.g., customer engagement, innovation, customer loyalty).

7.2. Research contributions

Our study provides clear research avenues to develop this area further. As more organisations use social media data to inform customer management systems and processes, assessing the impact on performance will remain crucial to justify the investment needed to achieve the integrations. Our results also highlight how big data and new artificial intelligence applications, such as machine learning, pose new opportunities to process social media data in real time and integrate it into existing systems. Furthermore, to our knowledge, our study is the first to analyse research on social CRM in a systematic quantitative

literature review and it combines rigorous analysis of bibliometric methods to inform the identification of themes in the literature and the layout of future research avenues.

CRediT authorship contribution statement

Rodrigo Perez-Vega: Writing – review & editing, Writing – original draft, Visualization, Project administration, Methodology, Formal analysis, Conceptualization. **Paul Hopkinson:** Writing – review & editing, Writing – original draft, Supervision, Formal analysis, Conceptualization. **Aishwarya Singhal:** Writing – review & editing, Writing – original draft, Visualization, Formal analysis, Conceptualization. **Marcello M. Mariani:** Writing – review & editing, Writing – original draft, Validation, Supervision, Methodology, Formal analysis.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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